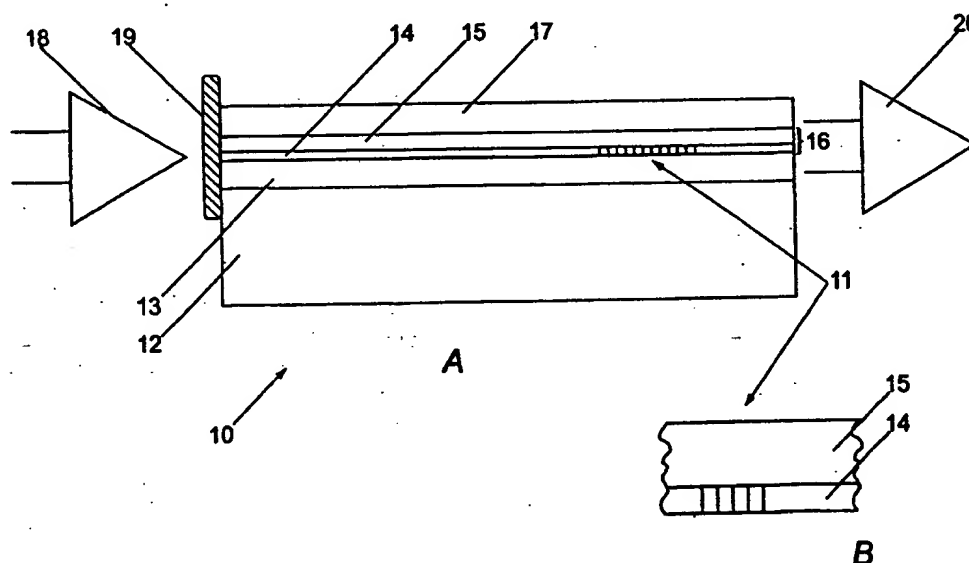




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(54) Title: OPTICAL WAVEGUIDE WITH MULTIPLE CORE LAYERS AND METHOD OF FABRICATION THEREOF



## (57) Abstract

An optical waveguide with multiple core layers for transmitting an optical signal comprises a substrate; an intermediate layer formed on said substrate; a waveguide core formed on said intermediate layer; and an upper cladding layer embedding said waveguide core. The waveguide core comprises a first core layer formed on said intermediate layer and a second core layer formed on said first core layer. The first core layer has photosensitive properties and the second core layer has optical gain properties.

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